

August 4th, 2025

Dr. Meredith Williams, Director Department of Toxic Substances Control 1001 I Street Sacramento, CA 95814

RE: Comments Supporting the Listing of Microplastics on the Candidate Chemicals List

Dear Dr. Williams,

The California Product Stewardship Council (CPSC) is engaged in legislation, regulations, and program updates to ensure Product Stewardship and Extended Producer Responsibility (EPR) programs run well in California to serve as a model for other states. We express our strong support for DTSC's proposal to add microplastics to Candidate Chemicals under the Safer Consumer Products (SCP) program.

We have supported the SCP program's science-led process and appreciate the dedicated efforts of DTSC scientists and advisors in advancing safer chemical management statewide.

Recent peer-revied studies further exemplify the continuous health hazards associated with microplastics and drive CPSC's advocacy in legislation and regulations:

Source	Key Findings
(Nihart et al., 2025)	Microplastics are increasingly found in human kidneys, liver, and brain tissues, with brain samples especially from individuals with dementia, showing higher levels of shard-like polyethylene fragments, emphasizing rising environmental exposure and urgent need to address health impacts and biological pathways.
ScienceDaily (2025)	Microplastics can alter the gut microbiome and brain function in mammals affecting their long-term health effects
(Boctor et al., 2025)	Microplastics contaminate soil systems, vegetables, and even internal organs through agricultural exposure pathways, primarily from mulching, biosolids and atmospheric deposition
WEF (2025)	Microplastics are found in seafood, produce and drinking water

This new path is a giant stride for **CPSC sponsored SB 707 (Newman)**, establishing California's first extended producer responsibility (EPR) framework for textiles.

SB 707 distinguishes microplastics and microfibers as separate concerns requiring specific action for each type of pollutant. We view DTSC's listing proposal as a critical next step that aligns with the intent of SB

707 to reduce microplastic pollution from synthetic fibers (especially polyester), which dominate the textile waste stream.

Recent research further supports the urgency of listing microplastics. The Materevole (2024) report, funded by the Ocean Protection Council, shows with peer-reviewed evidence that synthetic microfibers now account for more than 70% of microplastic pollution in textiles run off and dust, and common fabrics such as polyester fleece and nylon blends are major contributors to airborne and aquatic contamination.

Importance of Linking SCP with SB 707

- Synthetic textiles are a top source of microplastic pollution, with microfibers shedding during wear, washing and especially with mechanical and chemical recycling (Gliaudelyte et al., 2024)
- Research by Manivannan et al. (2025) estimates up to 23,00 microplastic fibers (MPFs) are released per gram of shredded textile.
- Textile waste audits confirm that California generates millions of pounds of blended synthetic clothing (California Department of Finance, 2025), the majority of which ends up in landfills or get exported to vulnerable nations. (Santa Barbara Independent, 2024)
- Synthetic fibers, which make up over 65% of global textile production, continually release microfibers during wear and end-of-life handling. These particles often carry hazardous additives such as PFAS, phthalates, azo dyes, and heavy metals. Recent studies have identified their presence in human blood, feces, and urine, and linked exposure even at low levels to cellular toxicity, DNA damage and oxidative stress (McCay & Mehta, 2024; Rovira et al., 2025).

CPSC's Recommendations

- 1. We urge DTSC to consider definitions from producer responsibility effort under SB 54 (Allen).
- 2. SCP's chemical listing authority should work in tandem with EPR policy frameworks to regulate product design and end-of-life practices that contribute to microplastic discharge.
- 3. As highlighted in the previous coalition comment letter (July 2023), microplastics meet all three core criteria of the SCP program: hazard, exposure potential, and environmental persistence.
- 4. Microplastics including synthetic textile fibers persist for decades in air, soil and water systems and exhibit known toxicity (Das, Dey, & Das, 2024)
- 5. We strongly recommend DTSC to prioritize textiles, especially synthetic apparel and household fabrics as the first product category evaluated following microplastics addition to the Candidate Chemical list. This recommendation builds on the findings in the 2023 CalSPEC report, commissioned by the legislature, which cited textiles as a top source of microplastic exposure pathways through laundering, abrasion and airborne fibers.

CPSC advocates for product systems that reduce chemical and plastic pollution at the source. SCP must

consider EPR and other regulatory mechanisms as complementary tools for managing microplastic sources.

By finalizing this listing, DTSC should consider evaluating safer alternatives in high impact consumer products and help drive innovation toward a less polluting fibers, upstream design improvements and producer accountability

Sincerely,

Jeanne Greech

Joanne Brasch, Director of Advocacy and Outreach

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